

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number  
**WO 2005/038712 A1**

(51) International Patent Classification<sup>7</sup>: **G06T 5/40, H04N 1/407**

(21) International Application Number: **PCT/FI2004/050148**

(22) International Filing Date: 13 October 2004 (13.10.2004)

(25) Filing Language: **Finnish**

(26) Publication Language: **English**

(30) Priority Data: 20035184 15 October 2003 (15.10.2003) FI

(71) Applicant (for all designated States except US): **INSTRUMENTARIUM CORPORATION [FI/FI]**; Nahkelantie 160, FI-04301 Tuusula (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **ERONEN, Esa [FI/FI]**; Lottistentie 9 A, FI-20100 Turku (FI).

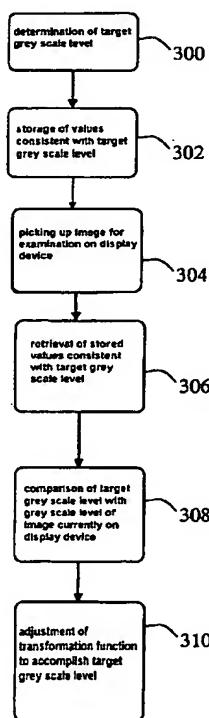
(74) Agent: **LEITZINGER OY**; Tammasaarenkatu 1, FI-00180 Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,**

[Continued on next page]

(54) Title: **METHOD FOR DISPLAYING DIGITAL GREY SCALE IMAGES AT DESIRED TONAL VALUE ON A SCREEN OF A DISPLAY DEVICE AND A DISPLAY DEVICE**



(57) Abstract: The invention relates to a method for displaying digital grey scale images at a desired tonal value on the screen of a display device. In the method, the operator pre-selects (300) manually, for example on the basis of an image visible on a display screen, a (mean) grey scale level of his/her desire, the values consistent therewith being stored (302) in a memory associated with a display device. When the operator picks up (304) a new image for examination, the memory is accessed to retrieve (306) therefrom the information regarding a target grey scale level and relevant to the present operator, said information being used for automatically calculating an individual transformation function relevant to the present new image and the image is automatically adjusted to an operator-specific target grey scale level (310).

WO 2005/038712 A1

Best Available Copy



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Best Available Copy